State of Alaska FY2009 Governor's Operating Budget

University of Alaska Fairbanks Organized Research Component Budget Summary

Component: Fairbanks Organized Research

Contribution to Department's Mission

The University of Alaska Fairbanks, the nation's northernmost Land, Sea, and Space Grant university and international research center, advances and disseminates knowledge through teaching, research, and public service with an emphasis on Alaska, the circumpolar North, and their diverse peoples. UAF - America's arctic university - promotes academic excellence, student success and lifelong learning.

University of Alaska Fairbanks Mission Statement Board of Regents' Policy 10.01.03, Adopted 6/8/06

Core Services

UAF is among the top 100 National Science Foundation-funded research institutions in the United States. Fairbanks is the research campus for the University of Alaska system; through the activities of its component research institutes, centers, laboratories and related research facilities it makes significant contributions to basic and applied science and engineering on state, national and international levels. Extramural and state support funded \$130 million in total revenue as a result of research during the past fiscal year. That research assisted natural resource managers, allowed expansion of cultural knowledge and contributed to developing safer, more economical construction practice guidelines.

Research institutes include the Institutes of Arctic Biology (IAB), Marine Science (IMS), Northern Engineering (INE), the Geophysical Institute (GI), Arctic Region Supercomputing Center (ARSC), and the International Arctic Research Center (IARC). Other research-based centers and units include the Agricultural and Forestry Experiment Station (AFES), Alaska Cooperative Fish and Wildlife Research Unit (AKCFWR), Alaska Native Language Center (ANLC), Alaska Quaternary Center (AQC), Fisheries Division - Juneau Center, Fishery Industrial Technology Center (FITC), Center for Global Change and Arctic System Research, Mineral Industry Research Laboratory (MIRL), Office of Electronic Miniaturization (OEM), Transportation Research Center, Petroleum Development Laboratory (PDL) and the University of Alaska Museum of the North (UAMN).

UAF must continue to build upon its research strengths to function as a center of excellence in northern research and related graduate and undergraduate education. Emphasis on interdisciplinary research and scholarship that brings the various UAF departments and research institutes closer together will position the university to respond to emerging state, national and international research opportunities.

FY2009 Resources Allocated to Achieve Results				
FY2009 Component Budget: \$152,345,400	Personnel: Full time	723		
	Part time	31		
	Total	754		

Key Component Challenges

Sustaining the highly accepted and extremely productive activities of the Arctic Region Supercomputing Center (ARSC) Postdoctoral Fellows.

There are several new international arctic research programs being established with the completion of IPY The International Arctic Research Center (IARC) must continue to play a central role in these programs.

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The portfolio of external funding at IARC needs to be balanced among U.S. agency sponsors and Japanese funding sources, and its stability over the 5-10 year timeframe needs to be ensured.

The Biological Sciences Facility (BIOS) is needed to provide modern research and science support space for growing programs in the life sciences including biomedical and health disparities research, climate change and environmental sciences, and animal and plant genetics.

Promote the development of opportunities at the Geophysical Institute (GI) in remote sensing, including continued support for the Advanced Land Observing Satellite (ALOS), Americas Data Node (AADN), Alaska Volcano Observatory (AVO), and Synthetic Aperture Radar (SAR);

Diversify business at Poker Flat Research Range to include strong support for the Unmanned Aerial Vehicle Alaskan resources program and for the National Science Foundation Advanced Modular Incoherent Scatter Radar activities supporting studies of the ionosphere over Alaska;

Re-establish full funding for the Alaska Volcano Observatory.

The key challenges for the College of Engineering and Mines/Institute of Northern Engineering (CEM/INE) are growing our relationships in the state, providing the space and services to a rapidly growing organization, and instituting a model for sustained growth.

There is no space available for College of Liberal Arts (CLA) Anthropology research labs.

The School of Fisheries and Ocean Sciences (SFOS) FY09 operating budget request focuses on the costs of supporting the new Lena Point facility FY09 Lena Point Increment. If O&M funds are not provided to SFOS for operating this facility, we will have little choice other than to cut programs and close one SFOS site.

Significant Changes in Results to be Delivered in FY2009

- Application of funds provided through the State/Statewide/UAF will be aligned with university related projects in support of students, staff, scientists, faculty and continuation of ARSC research, training and outreach activity in the Discovery Laboratory.
- Use internal unit funds to assist in sustaining Alaska Volcano Observatory activity.
- Recruit additional faculty and scientists in the biomedical sciences; maintain research support services in bioinformatics and INBRE related research.
- With IARC's increased emphasis on education and outreach, we foresee greater interactions with school systems and the public in Alaska;
 - -The transition to research partnerships with Japanese scientists should enhance our contributions to Arctic science in the Pacific sector;
 - -Vetting of IARC's science plans with the broader research community should enhance external partnerships, both nationally and internationally, thereby enhancing IARC's visibility in the international research arena.
- The primary change in results for INE in 2009 will be an increase in efficiency, that is, average research delivered per faculty. While this will equate to more research dollars per person, the most important metric is the increased number of products delivered to meet Alaskan needs.
- The Anthropology Department could begin to plan for permanent space in areas freed up by construction of the BIOS building.
- Additional money would be used by CLA to increase the fiscal tech in the Office of Research Development from half-time to full-time
- The FY09 budget increment for Lena Point operating costs will allow SFOS to bring that facility onto line for teaching, research and service operations in Fisheries without devastating the SFOS budget.

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Major Component Accomplishments in 2007

ARSC:

ARSC integrated a large supercomputing system, a 2312 processor cluster named Midnight, that supports operational forecasting and large scale modeling for Alaska sized phenomena www.arsc.edu/resources/midnight.html

As part of International Polar Year activities, ARSC implemented WRF (Weather Research and Forecasting model), offering several workshops and sponsoring the national Great Alaska Weather Modeling Symposium. The new ARSC weather server (http://weather.arsc.edu) provides ready access for the Fairbanks office of the National Weather Service, the Alaska Ocean Observing System, and the Alaska Volcano Observatory. Miho Aoki, joint faculty member in ARSC and the Art Department, won the Digital Creation Award for a major international graphics competition sponsored by Japan's Toray Industries Inc. www.uaf.edu/news/a news/20070426101358.html

GI:

The Japanese Advanced Land Observing Satelite (ALOS) has adopted UAF to host its Americas Data Node. This service in now operational at the Alaska Satellite Facility within GI and distributing ALOS data internationally. Unmanned aerial vehicle operations have begun, based at the Poker Flat Research Range and first campaign has been completed successfully with trained UAF pilots.

The NASA-funded GI HEX2 rocket project was successfully flown at Poker Flat Research Range in February 2007 making in-situ measurements of the three-dimensional wind field in the ionosphere between Poker Flat and the Arctic Ocean.

The Aeronomy of Ice in the Mesosphere Satellite, co-directed from the GI, was launched in May and is now orbiting and operational making measurements of high-altitude atmospheric ice over Alaska.

The National Science Foundation funded Advanced Modular Incoherent Scatter Radar established at the Poker Flat Research Range with locally established optical support.

National Science Foundation and state-funded education programs for Information Technology Experiences for Students and Teachers (ITEST) and Science, Technology and Engineering Program (STEP) have provided curriculum and instruction for K-12 teachers and students in Fairbanks and remote northwestern Alaskan villages in the context of the International Polar Year.

Four National Science Foundation Grants for International Polar Year research were funded this year for Professors Hajo Eicken, Vladimir Romanovsky(2) and Richard Collins.

IAR:

Successful 5-year renewals of an \$11 million National Institutes of Health grant for the Center for Alaska Native Health Research (CANHR) and a \$5 million National Institutes of Health grant for the UAF Alaska Specialized Neuroscience Research Program were received.

Faculty received a \$3.8 million sub-award to study how influenza viruses with pandemic potential such as avian influenza H5N1 evolve, adapt and are successfully transmitted in nature. IAB is a partner with UCLA in an \$18.5 million NIH award to create the Center for Rapid Influenza Surveillance and Research.

Faculty received a \$4 million renewal of the National Science Foundation's Integrative Graduate Education and Research Traineeship (IGERT) program grant which supports Resilience and Adaptation Program (RAP). Faculty obtained Phase III funding from the National Science Foundation Experimental Program to Stimulate Competitive Research (EPSCoR) program to support UAF faculty in the physical, biological and social sciences who are collaborating on problem-based research addressing social-ecological sustainability in Alaska.

The Toolik Field Station was selected as an Arctic Observatory Network site by the National Science Foundation in an International Polar Year (IPY) competition.

IARC:

The Nansen and Amundsen Basins Observational System (NABOS) cruises have led to the discovery of multiple warm-water intrusions from the North Atlantic Ocean into the Arctic Ocean propagating counter-clockwise around the arctic margin on decadal time scales, likely affecting the thickness and extent of sea ice and contributing to the record minimum of sea ice in summer 2007.

An assessment of the Intergovernmental Panel on Climate Change (IPCC) models' ability to simulate Alaskan future conditions has identified the global climate models most suitable for use for Alaska, thereby narrowing the uncertainty in Alaskan climate projections.

The loss of sea ice, and the attendant loss of sea-ice algae, was found to be potentially important for future ecosystems and fisheries in the Arctic Ocean, not only quantitatively but also in terms of food web structure.

CEM/INE:

In order to better meet State needs, the Alaska University Transportation Center (AUTC) launched a hiring program 2006 that resulted in the addition of six new, jointly appointed, tenure track faculty with the Civil and Environmental Engineering department and AUTC. AUTC completed its first call for proposals in January of 2007 and is currently in the process of evaluating projects for funding.

INE has instituted new partnerships between INE faculty and staff and approximately 20 agencies, organizations, and interests.

Alaska

CLA:

CLA hosts one of 13 International Polar Year Post-doctoral Research Fellows selected from among 108 international applicants. Olga Lovick, linguistics, University of Cologne, Germany, is researching the impact of ecological and social change in the Upper Tanana Athabascan region and how those changes relate to the language.

School of Natural Resources and Agricultural Sciences (SNRAS):

Created the Scenarios Network for Alaska Planning (SNAP) [www.uafedu/snraslafeslpubs/nrnlindex.html] within SNRAS/ AFES in collaboration with the

Alaska Center for Climate Assessment and Policy (ACCAP) [http://www.uafedulaccap/index.htm] within ISER at UAA and INE in SME.

School of Management (SOM):

The SOM received \$164,000 from Flint Hills to create a mobile Experimental Economics Laboratory.

Statutory and Regulatory Authority

No statutes and regulations.

Contact Information

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146,831.6

152,345.4

Fairbanks Organized Research Component Financial Summary All dollars shown in thousands FY2007 Actuals FY2008 FY2009 Governor **Management Plan** Non-Formula Program: Component Expenditures: 71000 Personal Services 74,214.7 78,655.4 81,686.8 72000 Travel 5,749.3 5,285.5 5,360.5 73000 Services 31,857.8 39,665.2 42,007.6 74000 Commodities 8,433.7 9.277.4 9,342.4 75000 Capital Outlay 6.207.6 10.847.6 10.847.6 77000 Grants. Benefits 3.061.0 3.100.5 3.100.5 78000 Miscellaneous 0.0 0.0 0.0 **Expenditure Totals** 152,345.4 129,524.1 146,831.6 **Funding Sources:** 1002 Federal Receipts 71,742.6 86,267.3 88,476.6 1003 General Fund Match 3,043.5 3,003.2 3,003.2 1004 General Fund Receipts 15,943.9 17,926.8 16,877.9 1007 Inter-Agency Receipts 1,650.4 3,050.0 3,050.0 1048 University Restricted Receipts 33,947.2 35,268.8 31,350.9 1061 Capital Improvement Project Receipts 1.205.4 720.0 720.0 1092 Mental Health Trust Authority 69.6 0.0 0.0 **Authorized Receipts** 1174 UA Intra-Agency Transfers 3,583.8 3,900.0 3,900.0

129,524.1

Funding Totals

Summary of Component Budget Changes From FY2008 Management Plan to FY2009 Governor

		All dollars shown in thousands			
	General Funds	Federal Funds	Other Funds	<u>Total Funds</u>	
FY2008 Management Plan	18,947.1	86,267.3	41,617.2	146,831.6	
Proposed budget increases: -University Research Investment- Climate Impact and Alaska's	900.0	1,000.0	0.0	1,900.0	
Natural Resources -U of A Adjusted Base Utility Increase	110.0	0.0	134.5	244.5	
-U of A Adjusted Base Library, Information Technology and Other Operating Fixed Costs	118.7	0.0	913.5	1,032.2	
-U of A Adjusted Base Salary Increase- UNAC Across the Board Increase	66.5	100.0	99.4	265.9	
-U of A Adjusted Base Salary Increase- UNAC Market Increase	89.7	100.0	169.1	358.8	
-U of A Adjusted Base Salary Increase- AHECTE Grid Increase	14.3	0.0	1.8	16.1	
-U of A Adjusted Base Salary Increase- AHECTE Step Increase	26.7	0.0	3.3	30.0	
-U of A Adjusted Base Salary Increase- Non Represented Grid Increase	299.6	460.2	0.0	759.8	
-U of A Adjusted Base Salary Increase- Non Represented Step Increase	357.4	549.1	0.0	906.5	
FY2009 Governor	20,930.0	88,476.6	42,938.8	152,345.4	

Fairbanks Organized Research Personal Services Information				
	Authorized Positions		Personal Services	s Costs
	FY2008			
	<u>Management</u>	FY2009		
	<u>Plan</u>	Governor	Annual Salaries	40,699,897
Full-time	717	723	Premium Pay	0
Part-time	31	31	Annual Benefits	18,804,311
Nonpermanent	0	0	Labor Pool(s)	25,587,595
·			Less 4.00% Vacancy Factor	(3,405,003)
Totals	748	754	Total Personal Services	81,686,800

Position Classification Summary					
Job Class Title	Anchorage	Fairbanks	Juneau	Others	Total
Able Seaperson	0	3	0	0	3
Admin Generalist 2	0	7	0	1	8
admin Generalist 3	0	1	0	0	1
Admin Generalist 3	0	16	0	0	16
Admin Generalist 4	0	8	0	1	9
Admin Specialist 1	0	10	0	0	10
Admin Specialist 2	0	5	0	1	6
Admin Specialist 2 (Exempt)	0	1	0	0	1
Admin Specialist 3	0	3	0	0	3
Admin Specialist 3 (Non Exempt	0	2	0	0	2
Admin Specialist 3 (NonExempt)	0	1	0	0	1
Admin Specialist 4	0	5	0	0	5
Administrative Assistant	0	1	0	0	1
Administrative Management 1	0	1	0	0	1
Administrative Management 2	0	3	0	0	3
Administrative Management 3	0	5	0	0	5
Administrative Management 4	0	5	0	0	5
Administrative Professional 1	0	1	0	0	1
Administrative Professional 2	0	1	0	0	1
Administrative Professional 3	0	1	0	0	1
Analyst	0	0	0	1	1
Assistant Professor	0	27	2	5	34
Assistant To (Nonexempt)	0	1	0	0	1
Associate Dean (Admin)	0	2	0	0	2
Associate Director	0	1	0	0	1
Associate Director (Admin)	0	3	0	0	3
Associate Professor	0	19	0	4	23
Chief Scientist	0	2	0	0	2
class	0	3	0	0	3
classIS Ops Technician 3	0	1	0	0	1
Comm Specialist 3 (E)	0	3	0	0	3
Communications Manager 1	0	1	0	0	1
Communications Manager 2	0	1	0	0	1
Communications Specialist	0	1	0	0	1
Communications Specialist 1	0	1	0	0	1
Communications Specialist 2	0	3	0	0	3
Communications Specialist 3	0	9	1	0	10
Communications Specialist 4	0	2	0	0	2
Coordinator (Exempt)	0	1	Ō	0	1

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Position Classification Summary					
Job Class Title	Anchorage	Fairbanks	Juneau	Others	Total
Coordinator (Nonexempt)	0	3	0	0	3
Crafts & Trades I (CT1)	0	1	0	2	3
Crafts & Trades II (CT2)	0	6	0	1	7
Crafts & Trades III (CT3)	0	7	0	2	9
Custodian (Cust)	0	1	0	0	1
Director	0	1	0	0	1
Director (Academic)	0	6	0	0	6
Director (Admin)	0	10	0	0	10
Director (Admin)-Acting	0	1	0	0	1
Engineer	0	3	0	1	4
Executive Officer	0	2	0	0	2
Fac Svcs-MO&U Supervisor 3	0	1	0	1	2
First Mate	0	0	0	1	1
Fiscal Manager 2	0	1	0	0	1
Fiscal Manager 3	0	1	0	0	1
Fiscal Professional 1	0	6	0	0	6
Fiscal Professional 2	0	7	0	0	7
Fiscal Professional 3	0	2	0	0	2
Fiscal ProfessionI 2	0	1	0	0	1
Fiscal Technician 2	0	12	0	1	13
Fiscal Technician 3	0	10	0	1	11
Fiscal Technician 4	0	1	0	0	1
Human Resources Manager 1	0	1	0	0	1
Human Resources Professional 3	0	3	0	0	3
Human Resources Technician	0	1	0	0	1
Human Resources Technician 2	0	1	0	0	1
Human Resources Technician 3	0	2	0	0	2
Human Resources Technician 4	0	_ 1	0	0	1
IS Manager 1	0	2	0	Ö	2
IS Manager 2	0	1	0	0	1
IS Manager 3	0	4	0	0	4
IS Manager 4	0	2	0	0	2
IS Net Technician 6	0	2	0	0	2
IS Net Technician 7	0	3	0	0	3
IS Ops Technician 1	0	1	0	0	1
IS Ops Technician 2	0	1	0	0	1
IS Ops Technician 3	0	5	0	0	5
IS Ops Technician 4	0	5	0	0	5
IS Professional 1	1	7	0	0	8
IS Professional 2	0	17	0	1	18
IS Professional 3	0	48	0	1	49
IS Professional 4	0	35	0	1	36
IS Professional 5	0	4	0	0	4
Lab Assistant	0	2	0	Ö	2
Launch Officer	0	1	Ő	0	1
Library Professional 2	0	2	Ő	Ő	2
Maint Service Worker IV (MSW4)	0	2	Ő	Ő	2
Maint Service Workr III (MSW3)	0	0	0	1	1
Maintenance Serv Worker (MSW1)	0	1	0	0	1
Manager (NonExempt)	0	2	0	0	2
Marine Chief Engineer	1	0	0	1	2
Marine Deck 4	0	0	0	1	1
Marine Engineering 2	0	0	0	1	1
Personnel/Payroll Clerk	0	1	0	0	1
Post Doctoral Fellow	0	17	0	0	17
1. Sot Dootoral Follow	- EV20		0	0	11

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Position Classification Summary					
Job Class Title	Anchorage	Fairbanks	Juneau	Others	Total
President's Research Professor	0	1	0	0	1
Professor	0	29	2	2	33
Professor-Interim Director	0	1	0	0	1
Program Director	0	1	0	0	1
Res Inv-Climate-Fac	0	3	0	0	3
Res Inv-Climate-Res Staff	0	3	0	0	3
Research Aide	0	0	0	1	1
Research Assoc Professor	0	20	1	0	21
Research Associate	0	2	0	0	2
Research Associate (Academic)	0	3	0	0	3
Research Asst Professor	0	18	0	0	18
Research Profess 2 (Non Exempt	0	1	0	0	1
Research Professional	0	1	0	0	1
Research Professional 1	0	13	0	0	13
Research Professional 2	0	30	0	1	31
Research Professional 2(Non Ex	0	1	0	0	1
Research Professional 3	0	11	0	1	12
Research Professional 4	0	15	0	1	16
Research Professional 5	0	12	0	0	12
Research Professor	0	12	0	0	12
Research Professor/Director	0	1	0	0	1
Research Tech 4 (Exempt)	0	1	0	0	1
Research Technician	0	1	0	0	1
Research Technician 1	0	9	0	0	9
Research Technician 2	0	32	0	1	33
Research Technician 3	0	19	0	8	27
Research Technician 4	0	17	0	0	 17
Researcj Professional 3	0	1	0	0	1
Steward	0	0	0	1	1
Supervisor (Exempt)	0	3	0	0	3
Supervisor (Nonexempt)	0	2	0	0	2
System Analyst	0	1	0	0	1
Systems/Software Engineer	0	1	0	0	1
Technician	0	1	0	0	1
Term Asst Professor	0	1	0	0	¦
Term Instructor	0	3	0	0	3
Term Research Asst Professor	0	<i>J</i>	0	0	4
Term REsearch Asst Professor	0	1	0	0	1
Term Research Professor	0	1	0	0	1
Translator/Interpreter	0	1	0		1
	0	1	0	0	1
Vice Chancellor (Admin)	0	4	0	0	4
Writer/Developer (Nonexempt)	U	4	U	0	4
Totals	2	700	6	46	754